

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>P84022PC00/DAN</b>	<b>FOR FURTHER ACTION</b>	
	see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/GB2004/000999</b>	International filing date (day/month/year) <b>11/03/2004</b>	(Earliest) Priority Date (day/month/year) <b>18/03/2003</b>
Applicant <b>NANOMAGNETICS LTD</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b.  With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2.  Certain claims were found unsearchable (See Box II).

3.  Unity of invention is lacking (see Box III).

4. With regard to the title,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the abstract,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

as suggested by the applicant.

as selected by this Authority, because the applicant failed to suggest a figure.

as selected by this Authority, because this figure better characterizes the invention.

b.  none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER  
 IPC 7 G11B5/842 G11B5/712 H01F41/16 H01F10/00 H01F1/00  
 A61K9/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 G11B H01F A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PAUL CALVERT: "Inkjet Printing for Materials and Devices" CHEM. MATER., vol. 13, 9 December 2001 (2001-12-09), pages 3299-3305, XP002284900 cited in the application  the whole document	1-3, 6, 7, 13, 14, 26-29, 35, 36, 48-51, 57, 58, 61, 70, 71, 85, 86
A	EP 1 217 616 A (NANOMAGNETICS LTD) 26 June 2002 (2002-06-26)	1, 3-5, 17-21, 26, 40-43, 48, 61, 65, 66 85, 86
X	claims 1, 3-8 paragraphs '0001!, '0009!	-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*&\* document member of the same patent family

Date of the actual completion of the international search

18 June 2004

Date of mailing of the international search report

09/07/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 361 161 B1 (CARLTON DONN B ET AL) 26 March 2002 (2002-03-26)  claims 1,3,6 column 1, line 46 - column 5, line 65 -----	1,2,17, 26,27, 40,48, 49,61, 62,65, 85,86
A	WO 96/22533 A (FIRST MEDICAL INC) 25 July 1996 (1996-07-25) cited in the application  claims 1,2,4,8,15-17,19,23,25 page 4, line 21 - line 25 page 8, line 34 - line 37 page 11, line 35 - page 13, line 2 -----	1,2, 10-14, 26,27, 32-36, 48,49, 54-58, 70,71, 74-78
A	US 2003/048341 A1 (STEARNS RICHARD G ET AL) 13 March 2003 (2003-03-13)  claims 1,4,15,16,42,116,124,130,136,142 paragraphs '0050!', '0057!', '0061!', '0062!', '0077!', '0082!', '0106! example 4 -----	1,8-11, 26, 30-33, 48, 52-55, 61-63, 70, 72-75,85
A	US 2001/055669 A1 (GOLDWASSER ISY ET AL) 27 December 2001 (2001-12-27)  claims 13,16-19,21,31-33,53,54,59,87,92-95,97,101 paragraphs '0004!', '0012!', '0017! - '0019!', '0066!', '0073!', '0092!', '0130! - '0136!', '0176!', '0177!', '0225! - '0227! tables I,VI ----- -/-	1,2,10, 11,26, 27,32, 33,48, 49,54, 55,61, 62,70, 71,74, 75,85,86

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RODA A ET AL: "Protein microdeposition using a conventional ink-jet printer" BIOTECHNIQUES, EATON PUBLISHING, NATICK, US, vol. 28, no. 3, March 2000 (2000-03), pages 492-496, XP002164952 ISSN: 0736-6205 cited in the application the whole document -----	70-80

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-25,85-86

a known method used to form a magnetic recording device, and magnetic recording device obtainable by said method  
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2. claims: 26-47,48-69

a method of forming a magnetisable film or a film of inorganic nanoparticles, said method characterized by using a suspension of magnetisable or inorganic nanoparticles, each having been formed within a protein shell  
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3. claims: 70-84

a method of forming a protein thin film, said method characterized by including a membrane filtration step  
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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 1217616	A	26-06-2002		GB 2319253 A EP 1217616 A2 AT 222017 T AU 4960097 A BR 9713083 A CA 2271970 A1 CN 1238059 A ,B DE 69714602 D1 DE 69714602 T2 EP 0938728 A1 WO 9822942 A1 HK 1022207 A1 JP 2001504277 T KR 2000053057 A US 2003189791 A1		20-05-1998 26-06-2002 15-08-2002 10-06-1998 18-01-2000 28-05-1998 08-12-1999 12-09-2002 03-04-2003 01-09-1999 28-05-1998 25-10-2002 27-03-2001 25-08-2000 09-10-2003
US 6361161	B1	26-03-2002		NONE		
WO 9622533	A	25-07-1996		AU 4698096 A WO 9622533 A1		07-08-1996 25-07-1996
US 2003048341	A1	13-03-2003		US 2002061258 A1 EP 1352112 A1 WO 02066713 A1 US 2002191048 A1 AU 2433602 A AU 9311101 A AU 9473301 A CA 2423063 A1 CA 2423068 A1 EP 1324823 A2 EP 1337325 A2 WO 0224323 A2 WO 0224324 A2 WO 0224325 A2 US 2003052943 A1 US 2003138852 A1 US 2002085063 A1 US 2002061598 A1 US 2002037579 A1 US 2002037527 A1		23-05-2002 15-10-2003 29-08-2002 19-12-2002 02-04-2002 02-04-2002 02-04-2002 28-03-2002 28-03-2002 09-07-2003 27-08-2003 28-03-2002 28-03-2002 28-03-2002 20-03-2003 24-07-2003 04-07-2002 23-05-2002 28-03-2002 28-03-2002
US 2001055669	A1	27-12-2001		US 6326090 B1 US 5776359 A US 5985356 A US 2003134089 A1 US 6004617 A US 6045671 A AU 3957795 A CA 2202286 A1 CN 1181055 A ,B EP 0789671 A1 EP 1002572 A2 EP 1002573 A2 EP 0992281 A2 JP 10512840 T NO 971777 A US 2002119243 A1		04-12-2001 07-07-1998 16-11-1999 17-07-2003 21-12-1999 04-04-2000 06-05-1996 25-04-1996 06-05-1998 20-08-1997 24-05-2000 24-05-2000 12-04-2000 08-12-1998 18-06-1997 29-08-2002

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No  
PCT/GB2004/000999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2001055669	A1	WO: 9611878 A1	25-04-1996
		US 6410331 B1	25-06-2002
		US 6346290 B1	12-02-2002
		US 6420179 B1	16-07-2002
		US 2003100119 A1	29-05-2003
		US 2003219906 A1	27-11-2003
		US 6419881 B1	16-07-2002
		US 6440745 B1	27-08-2002
		US 2004014077 A1	22-01-2004
		US 6649413 B1	18-11-2003
		US 6686205 B1	03-02-2004
		US 2001055775 A1	27-12-2001